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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/074,930	02/12/2002	Seyed A. Angadjivand	52830US014	9813

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EXAMINER

DEL SOLE, JOSEPH S

ART UNIT PAPER NUMBER

1722

DATE MAILED: 08/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

10/074,930

Applicant(s)

ANGADJIVAND ET AL.

Examin r

Joseph S. Del Sole

Art Unit

1722

-- The MAILING DATE f this communication appears on the cover sheet with the c rresp ndence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Pri rity under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement, as presented on the 1449 and filed 5/10/02, complies with the provisions of 37 CFR 1.97, 1.98 and MPEP 609. It has been placed in the application file and the information referred to therein has been considered as to its merits. However, the information concerning the three patent applications (Serial Nos. 09/415,566, 09/109,497 and 09/478,652) has not been considered. Since the applications were not accessible to the public, they are not proper as prior art (see MPEP 2128).

Specification

2. The disclosure is objected to because of the following informalities: a) at line 30 of page 3 the specification refers to "A recently-published U.S. patent discloses... the fiber webs (see U.S. Patent 5,780,153 to Chou et al.).", the Examiner suggests changing this to --U.S. Patent 5,780,153 to Chou et al. discloses... the fiber webs.--.

Appropriate correction is required.

Claim Objections

3. Claims 15 and 16 are objected to because of the following informalities: a) claims 15 and 16 should be rewritten as independent claims, without referring to parts as "(a) - (d)", but rather listing the parts out in full, and should use proper transitional phrases in the preambles as discussed in the MPEP at section 2111.03. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5, 7, 9, 12 and 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Sens et al (3,245,767).

Sens et al teach an apparatus having a fiber-forming device capable of producing free-fibers (Fig 1); a spraying mechanism (Fig 1, #30) for spraying a liquid on free-fibers; a collector (Fig 1, #25) positioned to collect free fibers in the form of a nonwoven fibrous web; a drying mechanism (Fig 1, #29) positioned to actively dry the nonwoven fibrous web; the fiber-forming device is an extruder (Fig 1, #2); an apparatus for producing a high-velocity gaseous stream (Fig 1, #22 or #31) that is capable of directing the stream of free-fibers to the collector; the spraying mechanism is configured to spray perpendicular to a stream of free-fibers; the spraying mechanism is configured to spray an atomizing spray; the fiber forming device is capable of producing melt-blown microfibers; the spraying mechanism is capable of spraying from multiple sides of a stream of free-fibers; the drying mechanism includes a vacuum source and includes a mechanism for mechanically removing liquid.

Art Unit: 1722

6. Claims 1-5, 7, 11-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Labino (2,658,848).

Labino teaches an apparatus having a fiber-forming device capable of producing free-fibers (Fig 1); a spraying mechanism (Fig 1, #71a and #71b) for spraying a liquid on free-fibers; a collector (Fig 1, #40 and #41) positioned to collect free fibers in the form of a nonwoven fibrous web; a drying mechanism (Fig 1, #50, #51, #65, #66 and #67) positioned to actively dry the nonwoven fibrous web; the fiber-forming device is an extruder (Fig 1, #10); an apparatus for producing a high-velocity gaseous stream (Fig 1, #24) that is capable of directing the stream of free-fibers to the collector; the spraying mechanism is configured to spray perpendicular to a stream of free-fibers; the spraying mechanism is configured to spray an atomizing spray; the fiber forming device is capable of producing melt-blown microfibers; the drying mechanism includes a heat source; the drying mechanism includes a vacuum source; the drying mechanism includes a stream of a heated drying gas and includes a mechanism for mechanically removing liquid.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1722

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Labino (2,658,848) in view of EP0845554A2.

Labino teaches the invention as discussed above including the use of water as the liquid from the spraying mechanism (Fig 1, # 71a and #71b and col 8, lines 60-70).

Labino fails to teach the spraying mechanism capable of spraying at a pressure of about 30kPa to about 3500kPa.

EP0845554A2 teaches spraying water onto a web at a pressure of about 30 kPa to about 3500 kPa (page 3, lines 43-48 and page 5, Table 2) for the purpose of providing filtration enhancing electret charge (page 3, lines 43-48).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the spraying mechanism of Labino with one capable of spraying water at a pressure of about 30kPa to about 3500 kPa as taught by EP0845554A2 because it would enable the providing of an electret charge on the free fibers.

11. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Labino (2,658,848) in view of Weber et al (3,959,421).

Labino teaches the invention as discussed above including the use of water as the liquid from the spraying mechanism (Fig 1, # 71a and #71b and col 8, lines 60-70).

Labino fails to teach the spraying mechanism located less than one foot laterally from the free fiber and less than one-half foot downstream from the fiber-forming device.

Weber et al teach a water spraying mechanism (Fig 1, #20) less than one foot laterally from the free fiber and less than one-half foot downstream from the fiber-forming device (col 3, lines 1-5) for the purpose of achieving maximum cooling (col 3, lines 45-50).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Labino with the spraying mechanism being less than one foot laterally from the free fiber and less than one-half

Art Unit: 1722

foot downstream from the fiber-forming device as taught by Weber et al because it enables maximum cooling.


Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph S. Del Sole whose telephone number is (703) 308-6295. The examiner can normally be reached on Monday through Friday from 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Wanda Walker, can be reached at (703) 308-0457. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 for non-after finals and (703) 872-9311 for after finals.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

J.S.D.
August 5, 2003


ROBERT DAVIS
PRIMARY EXAMINER
GROUP 1300 1702
8/7/03